POLYALKYLENE GLYCOL VISCOSITY-ENHANCING POLYMERIC FORMULATIONS

Abstract of the Invention

Hyaluronic acid and polyalkylene glycol (PAG) based materials have been found to exhibit a synergistic interaction, in which the viscosity of the mixture is more than twice as high as the viscosity expected from the viscosity of the individual components. The mixture otherwise has similar properties to those of its constituents, and in particular will crosslink to form covalently crosslinked gels if the PEG carries crosslinkable groups. The viscous formulation adheres well to tissue, and has applications as a tissue sealant and in tissue coating, prevention of adhesions, cell immobilization, regeneration of cartilage, bone and other tissue, as well as in controlled delivery of hyaluronic acid to sites in the body. Related materials exhibit similar effects.